Legend

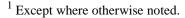
Red text	The red text reflects the terms for which Mallinckrodt's asapplied search term set proposes to modify the terms set forth in the current search term demand from Keller Rohrback. Please note that the document incorporates your two rulings regarding search terms provided on 10/7/18 – that is, all "w/100" need to be changed to "w/50", including the one before the numbered search strings, and all "AND" connectors need to be changed to "w/50". All terms in black text are found in both sides' search term sets.
Grey and beige shading	On July 24, Keller Rohrback provided its search term demand with certain terms highlighted as "high priority." For additional context, the search strings herein shaded in beige correspond to those that were previously indicated by Keller Rohrback as high priority terms. The search strings herein shaded in grey correspond to those that were previously indicated by Keller Rohrback as not high priority terms.

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(SAO or "short acting opioid" or LAO or "long acting opioid" or ROO or "rapid onset opioid" or "ER-LA" or "ER/LA" or "extended release, long acting" or (Oxy* w/5 30) or *Contin or Dilaud* or Delaud* or Butran* or Hysing* or Hising* or Targin* or (morphine w/2 sulfate) or *morphine or codeine or hydromorphone* or bupren* or *oxycodone or Kadian or Kadean or Norco or Actiq or Fentora or fentanyl* or fentin* or durages* or Nucynta or nucinta or nusynta or Nucynta or tapent* or opana* or perco* or perca* or subsys or subsis or exalgo* or roxicodone* or roxeco* or Xartemis* or Xartim* or methadose or methadone or naltrex* or opoid* or opiod* or opioid* opioid* opioid* opioid* opioid* opioid* opioid* opioid* opioid* opioid

w/50100¹ of any of the search queries below:

No.	Search String
1.	jama OR nejm or "journal of the american medical association" or "new england journal of medicine"
2.	Krebs or Kolodny or Lembke or Dreamland
3.	Gravely OR (Jane w/2 Porter) OR (Hershel w/2 Jick)
4.	(neonatal OR infant* OR newborn* OR bab*) w/3 (withdrawal)
5.	/AND-"black market" or illegal or street or dealer or stolen or theft or "false prescription" or "fake prescription"
6.	(("Center* for Disease Control" OR "CDC") w/10 guideline) or epidemic OR crisis OR catastrophe OR "public safety" OR "public health" or advisory or HIV or aids
7.	death* OR dying OR dead OR dies OR mortalit* OR fatal* OR toxic* OR coma or kill* OR (life w/3 threat*) or overdos* or OD
8.	/AND w/100 addict* OR hook* OR junk* OR dop* OR abus* OR kick* OR habit* OR overus* OR deter* "ADF" or "ADT"
9.	"ER visit*" OR hospital* OR rehab* OR detox OR intervention* OR emergency OR clinic
10.	recreational OR illicit OR illegal OR heroin OR herin OR herion or opium
11.	NDS or "Pharmaceutical Data Services" OR PDS or "PRA Health" or SDI or "Source Healthcare" or "Wolters Kluwer"
12.	Bllshit or bullshit or "bull shit" or corrupt or "cover up" or crap* or cya or dammit or damn or "deep shit" or "f—k" or "f ed" or "f uck" or fcuk or "fu k" or fu*k or fuck* or garbage or "gray





No.	Search String
	area" or "grey area" or "hit the fan" or "red flag" or s—t or s-hit or "sh t" or shit* or "time bomb" or toxic or "wtf" or (whiskey w/2 tango w/2 foxtrot) or OMG or "O.M.G."
13.	((DOJ or justice or DEA or Florida) w/5 settlement) or ((Hobart w/25 (diver* or fail* or violat* or audit* or security or DEA or investing*))
14.	"South Florida Pain" or George w/in 2 of (Jeff* OR Chris*) or "American Pain" or "Executive Pain" or "Hallandale Pain" or "East Coast Pain"
15.	<u>"C.A.R.E.S"</u> or (CARES w/2 Alliance) or "Collaborating and Acting Responsibly to Ensure Safety" or <u>(Charles w/2 Argoff)</u> or <u>(Bradley w/2 Galer)</u> or "Defeat Chronic Pain Now" or (Defeat w/2 Chronic)
16.	"adverse event*" or "adv event" or AERS or FAERS OR PV OR Pharmacovig*
17.	Arclight or IMS or IQVIA or Quintiles* or Scriptline* or Verispan* or Medscape
18.	"blue highway" or "oxy express" or migrat*
19.	/AND w/100 chew* OR inject* OR insufflat* OR snort OR grind OR ground OR illicit OR cook* OR dissolv* OR crush* OR break* OR inhal* OR heat* OR soak* OR manipul* OR shoot* OR intraven* OR "IV" OR "route of administration" or tamper*
20.	w/50 interstate
21.	bonus* OR compensat* OR lie* OR lying OR Liar* OR jail OR (lock* w/2 up) OR prison
22.	w/25 convict* OR liabilit* OR liabl* OR sue* OR violat* OR kill* OR wrong* OR victim* OR idiot* OR fine* OR punish* OR penal* OR license* OR DOJ OR plea* OR judgment* OR feds OR "attorney* general*" OR subpoena
23.	Whistle*blower or "whistle blower" OR hid* OR hiding* OR secret OR "cover up" OR conceal* OR scam* OR "witch hunt" OR crime* OR criminal* OR uncomfortabl* OR fault OR misgiving* OR worrie* OR worry OR trouble* OR problem*
24.	Hyperalgesia
25.	"market share" OR marketshare OR (share w/5 market) OR (leader w/5 market)
26.	"return on investment" OR ROI OR budget* OR "business plan" OR strateg* OR meeting* OR minutes* OR agenda* OR payor* OR project* OR (growth w/5 plan) OR snapshot* OR report*



No.	Search String	
27.	chargeback* OR (volume w/10 (discount* OR rebate*)) OR assistance OR coupon	
28.	"Law Enforcement Executive Development" OR (FBI w/2 LEEDA)	
29.	Mitigation OR REMS OR "Risk MAP" or RiskMap or "patient guidelines" or informed or consent or IRB or "investigator brochure"	
30.	"dear doctor" OR "dear health*" or "Dear HCP" or "Information response"	
31.	("prescription* monitor* program*" OR PDMP) w/25 Ohio	
32.	(citizen w/5 petition*)	
33.	complain* OR (incident w/5 report*)	
34.	DDMAC OR OPDP or minutes or "FDA contact" or "Type B" or "Type C" or "contact record" or "warning letter" or "untitled letter" or "incomplete response" or "complete response" OR label OR "black box"	
35.	((DEA or "Drug Enforcement Administration") w/10 (report* OR notif* OR submit*)) w/25 Ohio OR Narcs	
36.	doctor w/5 shop*	
37.	effective w/2 control*	
38.	PhRMA w/5 Code	
39.	warning w/2 letter*	
40.	congress* or lobby* or senat*	
41.	investigat*	
42.	"controlled substances act" OR csa OR "1301"	
43.	Grassley OR Baucus OR Hatch OR Wyden OR McCaskill	



No.	Search String
44.	/AND-((suspicious w/10 prescrib*) OR (suspicious w/3 order)) w/25 Ohio OR SOM
45.	(w/10 relief OR pain OR use OR function)
46.	(w/10 "daily")
47.	w/50 effect* OR efficac* or w/10 ("improved function" OR (level w/5 function))
48.	"around the clock" OR ((24 w/2 hour) OR ("twenty four hour" OR "twenty-four hour" OR "twenty four" w/2 hour OR "twenty-four" w/2 four w/2 hour)
49.	"field sales team" OR "sales rep*" OR pamphlet* OR brochure* OR "sales sheet*" OR video OR journal* OR reprint* OR article* OR publication* OR manual*
50.	"fifth vital" OR "5th vital"
51.	"promotional review committee" OR PRC OR "legal review" OR "medical legal"
52.	nonopioid* OR nonopiate* OR (non w/2 (opioid* OR opiate*))
53.	w/50 *arthriti* OR rheumat* OR anykylosing OR spondylit* OR spondyloarthri* or fibromyalgia or headache
54.	w/50 elderly OR geriatric* OR seniors OR "senior citizens"
55.	(exaggerate* w/5 (fear* OR scar* OR terr*))
56.	w/50 (inflam* OR "diabetic" OR DM OR DPN OR disc* OR "back pain")
57.	(key w/5 message*) OR (action w/5 plan*)}
58.	w/25 (marketing OR adverti* OR unbrand* OR brand* OR present* OR conference* OR exhibition* OR (video w/2 conferenc*) OR videoconferenc* OR poster* OR "trade show*" OR "visual aid*" OR handout* OR "hand out*" OR flyer* OR factsheet* OR "fact sheet*" OR "visual aid* OR "leave behind" OR one sheet*")
59.	(med* w/2 (necessary OR unnecessary))
60.	(mild w/5 pain)

No.	Search String
61.	mislead* OR deceive* OR misled OR misrep* OR deceiv* OR decept* or omit* or omission* or fraud*
62.	"nonsteroidal* <u>antiinflammatory"</u> OR "NSAID*"- OR Tylenol OR Advil OR Aleve OR acetaminophen OR ibuprofen OR aspirin OR naproxen
63.	(overprescrib* OR overdos* OR (doctor* w/5 shop*) OR alias* OR (drug* w/5 seek*) OR (multi* w/5 prescri*) OR (multi* w/5 physician*) OR (refill* w/5 histor*) OR crime* OR criminal* OR illicit)
64.	(prescribe* w/5 guide*)
65.	(quality w/2 life)
66.	(sciatic* OR (nerve* w/5 pain*) OR radiculo* OR (nerve* w/5 (imping* OR press*)))
67.	(script* w/10 (market* OR sale* OR rep*))
68.	Marketing w/25 (study OR studies OR trial* OR experiment* OR analys* OR research* OR investigat* OR conduct* OR author* OR scientific OR empirical OR statistic* OR observational OR cohort OR epi*)
69.	(suspect* OR fake* OR faking OR stole* OR steal* OR scam* OR "street value" OR (drug* w/5 deal*))
70.	(toleran* OR withdraw <u>al</u> *)
71.	"call note*"
72.	w/50-ceiling
73.	Chronic w/30 ("non-cancer pain" OR "non cancer pain")
74.	danger*
75.	dependen*
76.	euphori*
77.	myth*
78.	Painkiller* or pain-killer* or "pain killer" or "pain med" or "pain manag*" or "pain pill*"

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No.	Search String
79.	predispose*
80.	risk*
81.	safe*
82.	stigma*
83.	withdrawal
84.	Chronic w/30 ("non-cancer_pain" OR "non cancer_pain") or noncancer
85.	(use* OR using OR usage) w/510 ("long term" OR "short term" OR extend* OR "steady state")
86.	legitimate w/10 (pain OR patient* OR medical OR use* OR treatment* OR scien*)
87.	opioid* w/5 screen*
88.	pain* w/50100 ("off label" OR offlabel OR "prior auth*" OR reimburs*" OR disput* OR reject* OR "step therapy" OR indicat* OR first*line OR (not w/5 support*))
89.	pseudoaddict* OR (pseudo w/2 addict*) OR "pseudo-addict* OR toler* or depend*"
90.	undertreat* w/10 pain
91.	Marketing w/5 "focus group"
92.	("off label" OR offlabel OR "prior auth*" OR reimburs* OR dispute* OR reject* OR "step therapy" OR "first*line")
93.	(core OR high) w/2 prescriber*)
94.	"Target_* w/10 (list"-or panel or vet* or PCP OR PCPs OR rheumatol* OR neurol* OR nurse* OR RN OR "primary care" OR "pain doctor*" OR "pain specialist*" OR anesthes*)
95.	(provider* OR prescriber* OR doctor* OR physician* OR nurse* OR MD*) w/10 (decid* OR choos* OR choos* OR select* OR determin* OR favor* OR prefer*)
96.	w/50 (survey OR attitude* OR opinion* OR perception* OR perceive*)
97.	w/10 (detail* or market* or promot*) w/25 Ohio

No.	Search String
98.	<u>w/10 ((whale OR target* or "high volume") or "high prescrib*" OR (high w/3 prescriber)w/25</u> <u>Ohio)</u>
99.	<u>"pill-w/2</u> mill*" w/25 Ohio
100.	emergingsolutionsinpain*
101.	inthefaceofpain*
102.	letstalkpain*
103.	painedu*
104.	painknowledge*
105.	partnersagainstpain*
106.	prescriberesponsibly*
107.	smartmovessmartchoices*
108.	("867" OR "852"OR "850" OR wholesale* OR inventory* OR sale*downstream) w/520 (data* OR "EDI" OR report* OR trac*OR detail* OR scorecard* OR base*) w/25 Ohio
109.	"chargeback" OR "Charge back" OR "charge-back"
110.	(Distribut* OR trad*) w/20 (chain* OR network* OR partner* OR system* OR partner*)
111.	(Sale* OR volume OR rebate*) w/120 (promotion OR agree* OR program* OR incentive* OR allowance* OR adjustment* OR discount* or rebate)
112.	manufacturer w/5 *marketing*
113.	((suspicious OR above OR average OR unusual OR irregular OR atypical OR abnormal OR aberrant OR anomalous OR devia* OR notable OR disproportion*) w/50 (order* OR movement* OR volume* OR siz* OR frequen* OR sale* OR demand OR request* OR purchase* OR buy* OR flag* OR alert* OR release* OR pattern* OR trend* OR activit* OR forecast* OR detect* OR exception*) w/25 Ohio
114.	"OI" or (Order w/5 interest)
115.	"CSMP"OR "SOM" OR ((monitor* OR identif* OR detect* OR discover* OR track*) w/20 (program* OR system* protocol* OR procedure*))

No.	Search String
116.	(assign* OR monitor* OR allocat* OR impos* OR confer* OR task* OR diligence OR flag* OR review* OR document* OR existing OR customer*) w/120 (threshold* OR baseline* OR forecast*)
117.	diversion OR-Hobart w/25 diver*
118.	"KYC" OR "know your customer" OR (diligence w/5 customer)
119.	Cardinal* OR Amerisource* OR McKesson* OR "HD Smith*" OR "H.D. Smith*" OR "Discount Drug*" OR "Prescription supply*" OR CVS OR "HBC" OR "Rite Aid*" OR "Walgreen*" OR "Walmart" OR "Wal-mart"
120.	Valuecentric* OR Valuetrak*
121.	(individual OR appl* OR manufact*) w/5 Quota-or "APQ"
122.	"prescriber-identifiable data" OR (prescriber w/5 data)
123.	net w/5 disposal
124.	utilization w/5 report
125.	(asses* or establish* or medical or scientific or research or industrial) w/10 (need)
126.	trend* w/5 "net disposal"
127.	"projected demand"
128.	("govt affairs" or "government aff*)
129.	Narcan OR Naloxone OR Amitiza OR Iubiprostone OR naloxegol OR movantik OR methylnaltrexone OR relistor OR naldemedine OR symproic
130.	w/50 (release OR onset OR duration)
131.	opiophob <u>ia* OR downstream OR threshold</u>
132.	Oxycotton or OC or O.C. or M30 or "M 30" or "M/30" or "Ms" or "M's" or Blues or Roxies or Mallies



Marketing Search Terms

1. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	IFO ((acarting in a good included advertised) OD ((acarting) OD (acarting) OD (acarting) OD (acarting)
spo	'50 "continuing medical education" OR "medical education" OR CME* OR fund* OR grant* OR onsor* OR collab* OR research* OR "investigator initiated" OR IIR)
	'50 ((patient* w/5 advoca*) OR (peer* w/5 program*) OR (speaker* OR w/5 bureau) * OR visor* OR symposi*)
3. ("k	key opinion leader*" OR kol* OR "thought leader*" OR (peer* w/5 program*) OR train*)
· · · · · · · · · · · · · · · · · · ·	arketing w/5 (sponsorship* OR "business plan*" OR campaign* OR dinner* OR lunch* OR norari* OR incent* OR gift* OR bonus* OR graft* OR brib*)
<u>((L)</u>	nciullo OR ((Scott OR Dr.) w/3 Fishman) OR Haddox OR Pergolizzi OR Portenoy OR Saper OR ynn OR Dr.) w/3 Webster) or Nalamachu or Yapundich or Schim or Hoffberg or Dore or ((Perry R Dr.) w/3 Fine)
6. "Ad	cademy of Integrative Pain Management" OR AIPM
7. <u>"Al</u>	Icohol Drug Abuse Directors" OR NASADAD
8. "Al	lliance for Patient Access" OR APA
9. "Ar	merican Academy of Pain Medicine" OR AAPM
10. "Ar	merican Chronic Pain Association" OR ACPA
11. "Ar	merican Geriatric* Society" OR AGS
12. " Ar	merican Osteopathic Association"
13. "Ar	merican Pain Foundation" OR APF
14. "Ar	merican Pain Society" OR APS
15. "Ar	merican Society for Pain Management Nursing" OR ASPMN
16. "Ar	merican Society of Addiction Medicine" OR ASAM OR ILSAM
17. "Ar	nti-Drug Coalition" OR CADCA
18. "bc	oard of pharmacy" OR "boards of pharmacy"
19. "Co	ollege on Problems of Drug Dependence" OR "CPDD"
20. "Fe	ederation of State Medical Boards" OR "FSMB"
21. "He	ealthcare Distribution Alliance" OR "HDA"

22.	"Healthcare Distribution Management Association" OR "HDMA"
23.	"Joint Commission" OR JCAHO OR JHACO
24.	"National Association of Drug Diversion Investigators" OR NADDI
25.	"National Initiative on Pain Control" OR NIPC
26.	"National Pain Foundation" OR NPF
27.	"Pain and Policy Studies Group" OR PPSG
28.	"Pain Care Forum" OR PCF
29.	"Society of Interventional Pain" OR ASIPP
30.	"U.S. Pain Foundation" OR "US Pain Foundation" OR USPF
31.	"Will Rowe"
32.	"Woodberry Associates"
33.	"front group"
34.	*Panchal*
35.	"American Association for the Treatment of Opioid Dependence" OR AATOD
36.	"Physicians for Responsible Opioid Prescribing" OR PROP
37.	(media OR magazine OR spread or press)

